CLAIMS

1. An aquatic treadmill to be submersed in a swimming pool (2) containing a body of water (3) in a predetermined level, characterized in that it comprises:

- a base (10) affixed to the edge (1) of the swimming pool (2), externally to the area occupied by the body of water (3);
- an structural arm (20) having a mounting end articulated to the base (10), in order to be selectively and angularly displaced between an inoperative position, elevated and external to the area occupied by the body of water (3), and an operative position, in which it is downwardly projected, so as to have a free end penetrating into the body of water (3);
- an arm actuator (12), which is simultaneously articulated to the base (10) and to the structural arm (20), in order to produce the angular displacement of the latter between its operative and inoperative positions;
- an elongated chassis (30), having an end articulated to a free end of the structural arm (20), in order to be selectively angularly displaced between an inoperative position, seated against the structural arm (20), and a substantially horizontal operative position;
- a chassis actuator (50), which is simultaneously articulated to the structural arm (20) and to the chassis (30), in order to produce the angular displacement of the latter between its operative and inoperative positions;
- a support frame (40) mounted to the chassis (30) and carrying a pair of end transversal rollers (47), around which an endless belt (41) is mounted.

2. An aquatic treadmill, according to claim 1, characterized in that the chassis (30) is seated onto the bottom of the swimming pool (2) when in the operative position.

3. An aquatic treadmill, according to claim 2, characterized in that the chassis (30) is seated onto the bottom of the swimming pool (2) by means of shoes (32), with adjustable height and which can be mounted under the chassis (30).

4. An aquatic treadmill, according to claim 1, characterized in that the chassis actuator (50) has a fixed end (52) articulated in a region of the structural arm (20) close to its articulation to the base (10), and a movable end (51) articulated to a free end of a lever arm (33) that projects from the chassis (30) beyond its hinge (26) to the structural arm (20).

5. An aquatic treadmill, according to claim 4, characterized in that the support frame (40) has an end portion that is transversally pivoted (36) to the chassis (30), so as to be selectively and angularly displaced between a horizontal position of "zero" inclination and a maximum inclination position.

6. An aquatic treadmill, according to claim 5, characterized in that the support frame (40) presents an end portion, opposite to that pivoted to the chassis (30), the angular displacement of the support frame (40) being achieved by an inclination actuator (45) having a movable end (45a) articulated to said end portion of the support frame (40) and a fixed end articulated to the chassis actuator (50) so as to move with the latter.

7. An aquatic treadmill, according to claim 6, characterized in that the angularly movable end portion of the support frame (40) is articulated to a

firs end (43a) of a rigid rod (43) whose second end (43b), opposite to the first one, is articulated to a free end (44b) of a small rigid arm (44), having another end (44a) articulated to the lever arm (33) of the chassis (30), in the same hinge of the movable end (51) of the chassis actuator (50), the free end (44b) of the small rigid arm (44) and the second end (43b) of the rigid rod (43) being articulated to the movable end (45a) of the inclination actuator (45).

8. An aquatic treadmill, according to claim 1, characterized in that it comprises a pair of lateral bars (60) to be grasped by the user's hands, each lateral bar (60) having an end (61) articulated to the structural arm (20) and an opposite end (62) articulated to the upper end of a column (65), whose lower end (66) is hinged to a respective side of the support frame (40).

9. An aquatic treadmill, according to claim 1, characterized in that the end transversal roller (47), adjacent to the structural arm (20), is coupled to a hydraulic motor (42) so as to be rotatively driven by the latter.

10. An aquatic treadmill, according to claim 9, characterized in that it comprises a first hydraulic pump (70) to supply the hydraulic motor (42) and a second hydraulic pump (80) to supply the arm actuator (12), the chassis actuator (50), and the inclination actuator(45) by means of respective directional valves (V1, V2, V3), said hydraulic pumps being mounted external to the body of water (3) of the swimming pool (2).

11. An aquatic treadmill, according to claim 10, characterized in that the operation of the first hydraulic pump (70) is commanded by a speed variation

electronic means (75) operatively associated with the user control panel (90).

12. An aquatic treadmill, according to claim 11, characterized in that the user control panel (90) is operatively associated with the actuator electronic control means (85), to allow the user to command the activation of the inclination actuator (45).

13. An aquatic treadmill, according to claim 12, characterized in that the user control panel (90) is fixed to the free end of an arm (59) having a basic end articulated to the base (10) and operatively associated to the arm actuator (12), in order to be angularly displaced by the latter, between an inoperative position, in which it is displaced upwardly and outwardly of the area of the body of water (3), and an operative position in which it is positioned above the body of water (3) and above the support frame (40).

14. An aquatic treadmill, according to claim 12, characterized in that the second hydraulic pump (80) and the directional valves (V1, V2, V3) have their operation commanded by an actuator electronic control means (85) which is operatively associated with an operator control panel (88).